

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

C. Amendments to the Claims.

1. (Currently Amended) A voice and data network, comprising:

a) a telephone and a computer connected to a voice and data module (VDM),

b) a plurality of said VDM devices connected to a plurality of telephone wires in a building,

c) said plurality of telephone wires connected together to provide an analog telephone network in which only one analog phone can communicate on a given line at one time in ordinary telephone service,

d) a link to wide area network (LTW) connects said telephone network to a Public Service Telephone Network (PSTN) and an Internet Service Provider (ISP),

e) said LTW and said plurality of said VDM devices communicate together over said telephone network using communication addresses assigned to said LTW and each VDM of said plurality of VMD devices.

2. (Original) The voice and data network of claim 1, wherein said plurality of VDM devices connect a plurality of telephones and a plurality of personal computers to a plurality of data signals and a plurality of voice signals on said telephone network operating concurrently.

3. (Currently Amended) The voice and data network of claim 1, wherein said LTW and said plurality of VDM devices communicate over said network of telephone wires by means of ~~Token in Ethernet Protocol (TEP)~~ technology.

4. (Original) The voice and data network of claim 1, wherein telephone service is provided to said building from said ISP and said PSTN.

5. (Original) The voice and data network of claim 1, wherein more than one LTW is connected to said telephone network.

6. (Previously Presented) A method for communicating between network elements in a voice and data network, comprising:

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

a) monitoring a communication network by a first voice and data module (VDM) for a call from a second VDM and a call from a link to a wide area network (LTW) connected to said communication network,

b) monitoring a first phone and a first computer attached to said first VDM for an outgoing call to a destination containing a second phone and second computer connected to said second VDM, or an outside phone and an outside computer network through said LTW,

c) detecting said outgoing call and connecting said call if said destination is not busy, else providing a busy signal and disconnecting said outgoing call, connecting said call including sending a request for connection packet with an address for said LTW as the destination address,

d) detecting an incoming call and connecting said call if a receiving device comprising said first phone and said first computer is not busy, else sending back said busy signal and disconnecting said incoming call,

e) disconnecting phone calls or computer calls when a phone hang up or a computer disconnect signal is detected and returning to monitoring said network for said incoming call.

7. (Previously Presented) The method of claim 6 wherein, detecting, connecting and disconnecting a call is done with packets that carry communication between said first and second VDM, and between said first VDM and said LTW.

8. (Original) The method of claim 6 wherein, communicating between computers is done directly in Ethernet protocol eliminating the need for any conversion.

9. (Original) The method of claim 6 wherein, connecting a long distance phone call is done through said ISP without the use of a computer to assist in the call.

10. (Currently Amended) The method of claim 6 wherein further including, detecting a request from said first computer for a connection to an Internet service provider (ISP), sending request for the connection to said LTW and completing connection to said ISP ~~is completed~~ when the LTW responds with a connection completed signal.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

11. (Currently Amended) The voice and data network of claim 1, wherein:
at least one VDM device is connected to the telephone wires by a connector
originally used to provide a connection for an analog phone device.

5

12. (Previously Presented) The voice and data network of claim 1, wherein:
each of the plurality of VDM modules has a telephone and computer connected
thereto, each telephone and computer having a unique address with respect to all other
telephones and computers connected to VDM modules.

10

13. (Currently Amended) The method of claim 6, wherein:
step e) further includes sending a hang up packet to queue with the LTW
as a destination address, if a hang up is detected from the first phone but and a
hang up packet from the LTW in response to an outside phone has not been
detected, the hang up packet having an address of the LTW as a destination
address.

15

14. (Previously Presented) The method of claim 6, wherein:
step o) further includes sending a packet with a no line available indication
from the LTW if an outside line connected to the LTW is not available.

20

15. (Currently Amended) The method of claim 6, wherein:
step c) [d)] further includes if said outgoing call is not an outside call,
sending a request for connection packet to the second VDM.

25

16. (Previously Presented) The method of claim 6, wherein:
step d) further includes the LTW requesting an outside call to provide
extension data for an incoming call, and if an extension number is not received,
storing a predefined port address as a destination address in request for connection
packet.

30